

8 Supplemental Facilities



The need for bicycle parking varies with location. At popular destinations, like universities and schools, a successful bicycle parking program may require a substantial investment and a significant planning effort.

Bicycle Parking

Providing bicycle parking facilities is an essential element in an overall effort to promote bicycling. People are discouraged from bicycling unless adequate parking is available. Bicycle parking facilities should be provided at both the trip origin and the trip destination and should offer protection from theft and damage. If bicycle parking is not properly designed and located, bicyclists will use trees, railings and other appurtenances. This practice can cause damage and create a hazard for pedestrians.

Choosing bicycle parking devices: The following tips should be kept in mind when choosing bicycle parking devices. An overall parking program may include several different types of devices.

(1.) *Decide on the level of security needed.* Generally, short-term customer parking in front of retail stores need not be as secure as long-term employee parking at work places. Short-term parking needs can be satis-

fied by racks that simply allow use of high security, U-shaped locks. Long-term parking needs, on the other hand, may be satisfied by bicycle lockers, locked enclosures or locked rooms within the building.

(2.) *Look at how the device works.* Racks should not look complicated or have many moving parts. They also should work with all types of locks. If, in holding the bike, they come into excessive contact with the frame or delicate mechanisms, cyclists may not use the racks, fearing damage to their bicycles. Devices also should hold the bike in a way that makes it less likely to fall over; bent rims are common with racks that only support one wheel.

(3.) *Decide on the number of spaces needed.* As a rough estimate, determine current levels of bike usage. However, adequate bike parking can attract additional users, so, increasing that estimate somewhat may be justified. Consider doing an informal survey of potential users.



A bicycle rack in use on a downtown sidewalk. Tough galvanized coating, a vandal-resistant design, and ease of use with high security locks make this design popular.

(4.) *Determine whether vandalism is a factor.* Some sites are prone to vandalism. In these cases, the best bicycle parking is that which attracts the least amount of attention from vandals, can be mounted securely and is very sturdy.

(5.) *Consider the budget.* Bicycle parking can cost from \$35 per bike space to over \$300 per space. The need to save money must be weighed against the possibility that inadequate parking devices may not be used by bicyclists or may be destroyed by vandals.

(6.) *Contact other users.* Once the list of potential parking devices has been narrowed, ask for names of people who already have each type. Contact these people and ask about vandalism problems, user reactions, ease of installation, weather resistance, maintenance requirements and site constraints. Ask how long they have used the devices and how many have been installed.

Locating bicycle parking: Deciding just where to put bicycle parking can be difficult. The right location can mean the difference between a popular rack and an unpopular one. The following points should be kept in mind when locating bicycle parking facilities.

(1.) *Distinguish between long-term and short-term parking needs.* Long-term parking is needed at locations such as schools and universities, employment centers, transit stations and multi-family dwellings. In locating long-term parking, convenience is slightly less important than security.



(2.) *Locate bike parking near popular destinations, at the entrance bicyclists use.* Short-term parking is needed at locations such as shopping centers, libraries, recreation areas and post offices. Facilities should be conveniently located, near building entrances. The farther away from users' destinations the parking is located, the less likely it will be used. As is true with motorists, it is very difficult to force cyclists to park in an inconvenient place.

(3.) *Bike parking located next to car parking or traffic lanes will need protection.* If insufficient clearance is allowed, unprotected bike racks, as well as the bikes parked in them, can be damaged by car bumpers and fenders.

(4.) *Bicycle parking should be kept out of major pedestrian paths.* People often walk without watching where they are going. Some racks, when empty, can be easy to ignore but dangerous to shins. If parking must be placed where people walk, it should be very noticeable, large and high enough to see easily, and it should be free of dangerous projections.

(5.) *Parking should be located within view of windows, security offices or high volumes of pedestrian traffic.* Such locations tend to be self-policing, reducing the temptation for thieves and relieving the fears of bike users.

(6.) *Protection from the weather is useful, particularly for long-term commuter or short-term utilitarian parking.* Placing the parking under a roof overhang, but not under the drip line, can provide shelter from the weather at little cost. Bicyclists will appreciate the protection, both for their bikes and for themselves when locking up.

(7.) *Potential expansion and project phasing are important.* It may be best to try a few units at first and then, when demand warrants, expand. Parking location should allow for expansion in modular increments.

Other facilities and services

In addition to bicycle parking, several other improvements can complement roadway improvements and bicycle paths. For example, on long, uninterrupted bicycle paths, turnouts, picnic areas with tables and benches, or rest room facilities may be provided. Other improvements include the following:

Bicycle-transit interface: Provisions also should be considered for interfacing bicycle travel with public transit. In some communities, for example, buses on certain routes have bicycle racks mounted on either front or rear. In other communities, the transit company allows users to carry their bicycles on the bus during off-peak hours.

In several large metropolitan areas, bicyclists with special permits may take their bicycles on transit cars during certain hours. Developing and enhancing the connection between transit and bicycle use can increase the effectiveness of both modes in serving suburban areas.

Bicycle user maps: Printing and distributing bicycle maps is a popular high-benefit/relatively low-cost project. Several approaches are used, each with a different purpose. Those approaches and purposes are described briefly in the following sections.

Bicycle facility locations: In some communities, for example, agencies have published bicycle route maps to show designated bike lanes, routes and paths. These often show little else and are strictly guides to the facilities provided by the agency.

Bicycling suitability maps: In other communities, agencies have developed "suitability maps" which identify the relative difficulty of different segments of the road system. Such maps can help bicyclists avoid narrow, high-speed or high-volume roads, barriers and other problems. In addition, maps can provide information on traffic law, safety, mass transit and locations of parking facilities.

Hybrid maps: Because some agencies desire to show both their designated bicycle facilities and suitability features of the overall roadway network, they have developed hybrid maps. These combine the features of the previous two types.

Individual route maps: In some cases, agencies have developed one or more maps that show individual bicycle routes. For local loop routes, these can often be inexpensively printed



A bicyclist loading his bicycle onto a transit bus in Seattle, Washington. Such services are especially popular among utilitarian riders in many communities.

and quickly produced and updated. On the other hand, agencies like the North Carolina Department of Transportation Office of Bicycle and Pedestrian Transportation have produced more elaborate long distance route map sets.

